

|  |  |  |   |  |
|--|--|--|---|--|
| <b>MISSOURI STATE BOARD OF EDUCATION AGENDA ITEM:</b>  |  | <b>October 2014</b>                      |   |  |
| <b>REPORT ON THE DEVELOPMENT OF THE NEW MISSOURI CONTENT ASSESSMENTS<br/>FOR EDUCATOR PREPARATION AND CERTIFICATION</b>  |  |  |   |  |
| <b>STATUTORY AUTHORITY:</b><br>Sections 161.092, 168.011, 168.021,<br>168.071, 168.081, 168.400, 168.405, and<br>168.409, RSMo   |  | <input type="checkbox"/> Consent<br>Item | <input type="checkbox"/> Action<br>Item | <input checked="" type="checkbox"/> Report<br>Item |
| <p>DEPARTMENT GOAL NO. 3:</p> <p>Missouri will prepare, develop, and support effective educators.</p> <p>SUMMARY:</p> <p>The Office of Educator Quality has been working with Educational Testing Service (ETS); Evaluation Systems group of Pearson; and Missouri stakeholders to develop the next generation of assessments for educator preparation. The suite of assessments was named the Missouri Educator Gateway Assessments (MEGA) and has three objectives:</p> <ul style="list-style-type: none"> <li>• Recruiting the right people;</li> <li>• Assessing content knowledge; and</li> <li>• Assessing performance during student teaching and/or internships.</li> </ul> <p>The Missouri Content Assessments are a new series of exit examinations that must be passed by perspective teachers, counselors, librarians, principals and superintendents. The new content assessments also address the need to meet the requirements of <i>No Child Left Behind – Highly Qualified Teachers (HQT)</i>. Beginning on September 2, 2014, the Missouri Content Assessments replaced the Praxis II Series of content tests.</p> <p>Five goals to be addressed during the development of the Missouri Content Assessments include:</p> <ul style="list-style-type: none"> <li>• The test should be:           <ul style="list-style-type: none"> <li>○ Based on unique needs and requirements of Missouri PK-12 schools;</li> <li>○ Reflective of subject knowledge required for effective teaching in Missouri;</li> <li>○ Consistent with Missouri Learning Standards and national standards for content knowledge;</li> <li>○ Accurate and valid;</li> <li>○ Free from bias.</li> </ul> </li> </ul> <p>Industry standards define the processes used by Pearson to develop the Missouri Content Assessments. Over seven hundred and seventy (770) representatives from Missouri PK-12 schools and/or educator preparation programs participated in one or more of the steps listed below:</p> <ul style="list-style-type: none"> <li>• Conducted program planning;</li> <li>• Established advisory committees;</li> <li>• Developed the test framework;</li> </ul> |  |  |   |  |

- Conducted test framework review;
- Conducted content validation surveys;
- Developed assessment items;
- Conducted item review conference;
- Conducted marker-response selection meeting;
- Conducted item validation and standard setting conference;
- Began test administration on September 2 and September 29, 2014;
- Analyzed test results from the first two months of testing;
- Assisted the Department in developing recommendations for initial Missouri Qualifying Scores

The Missouri Content Assessments include fifty-six (56) test titles aligned to the areas of Missouri Certification. The tests were launched in two phases during September. The Missouri Certification areas and the Missouri Content Assessments are listed in the supporting materials.

In December, the Department will be making a recommendation to the board for setting the initial Missouri Qualifying Score for each of the fifty-six (56) assessments. The recommendations will be based upon the results from the Item Validation and Standard Setting Panels and impact data gathered from the first two months of testing. The Department will be sharing the recommendations with the Missouri Advisory Council for the Certification of Educators (MACCE) on November 17 and the Missouri Advisory Committee for Educator Preparation (MABEP) on November 18. Upon approval of the Missouri Qualifying Scores, Pearson will send the score reports.

**PRESENTER(S):**

Paul Katnik, Assistant Commissioner, and Gale "Hap" Hairston, Director, Educator Preparation, Office of Educator Quality will assist with the presentation and discussion of this agenda item.

| <b>Missouri Educator Gateway Assessments<br/>Missouri Content Assessments<br/>By Individual Certification Areas, Test Codes, and Titles<br/>October 27-28, 2014</b> |  |
|---|--|
| <b>Early Childhood – Birth to Grade 3 &amp; Elementary – Grades 1 to 6</b>  |  |
| <b>Certification Areas</b>  | <b>Test Codes &amp; Titles</b>                               |
| Early Childhood Education   | #064 Early Childhood Education                               |
| Elementary Education<br><i>Must pass all four (4) subtests to be eligible for certification in Elementary Education</i>   | Elementary Education Multi-Content** – All Four (4) Subtests |
|   | #007 English/Language Arts Subtest                           |
|   | #008 Mathematics Subtest                                     |
|   | #009 Science Subtest   |
| Elementary Mathematics Specialist   | #010 Social Studies Subtest                                  |
| Elementary Mathematics Specialist   | #012 Middle School Education: Mathematics                    |
| <b>Middle School Education – Grades 5 to 9</b>  |  |
| Language Arts   | #011 Middle School Education: Language Arts                  |
| Mathematics   | #012 Middle School Education: Mathematics                    |
| Science   | #013 Middle School Education: Science                        |
| Social Science  | #014 Middle School Education: Social Science                 |
| <b>Secondary Education – Grades 9 to 12</b>   |  |
| Agriculture   | #015 Agriculture   |
| Biology   | #016 Biology   |
| Business  | #017 Business  |
| Chemistry   | #018 Chemistry   |
| Earth Science   | #019 Earth Science   |
| English   | #020 English   |
| General Science   | #021 General Science   |
| Marketing   | #022 Marketing   |
| Mathematics   | #023 Mathematics   |
| Physics   | #024 Physics   |
| Social Science<br><i>Must pass all six (6) subtests to be eligible for certification in Social Science</i>  | Social Science Multi-Content** – All Six (6) Subtests        |
|   | #025 Social Science: United States History Subtest           |
|   | #026 Social Science: World History Subtest                   |
|   | #027 Social Science: Economics Subtest                       |
|   | #028 Social Science: Geography Subtest                       |
|   | #029 Social Science: Political Science Subtest               |
| #030 Social Science: Behavioral Science Subtest   |  |
| Speech & Theatre  | #031 Speech & Theater  |
| Technology & Engineering  | #046 Technology & Engineering                                |
| Unified Science – Biology<br><i>Must pass #016 Biology and all three (3) Unified Science tests to be eligible for certification in Unified Science – Biology</i>    | #016 Biology** – plus all three (3) tests listed below:      |
|   | #033 Unified Science: Chemistry                              |
|   | #034 Unified Science: Earth Science                          |
|   | #035 Unified Science: Physics                                |

| <b>Secondary Education – Grades 9 to 12</b>   |  |
|---|--|
| <b>Certification Areas</b>  | <b>Test Codes &amp; Titles</b>   |
| Unified Science – Chemistry<br><i>Must pass #032 Chemistry and all three (3) Unified Science tests to be eligible for certification in Unified Science – Chemistry</i>                                  | #018 Chemistry** – plus all three (3) tests listed below:  |
|   | #032 Unified Science: Biology  |
|   | #034 Unified Science: Earth Science  |
|   | #035 Unified Science: Physics  |
| Unified Science – Earth Science<br><i>Must pass #019 Earth Science and all three (3) Unified Science tests to be eligible for certification in Unified Science – Earth Science</i>                      | #019 Earth Science** – plus all three (3) tests listed below:  |
|   | #032 Unified Science: Biology  |
|   | #033 Unified Science: Chemistry  |
|   | #035 Unified Science: Physics  |
| Unified Science – Physics<br><i>Must pass #024 Physics and all three (3) Unified Science test to be eligible for certification in Unified Science – Physics</i>   | #024 Physics** – plus all three (3) tests listed below:  |
|   | #032 Unified Science: Biology  |
|   | #033 Unified Science: Chemistry  |
|   | #034 Unified Science: Earth Science  |
| <b>Grades K-12</b>  |  |
| Art   | #036 Art   |
| Chinese (Mandarin)  | #037 World Languages: Chinese – Mandarin   |
| Family & Consumer Sciences  | #038 Family & Consumer Sciences  |
| French  | #039 World Languages: French   |
| German  | #040 World Languages: German   |
| Health  | #041 Health  |
| Library Media Specialist  | #042 Library Media Specialist  |
| Music: Instrumental & Vocal   | #043 Music: Instrumental & Vocal   |
| Physical Education  | #044 Physical Education  |
| Spanish   | #045 World Languages: Spanish  |
| <b>Special Education</b>  |  |
| Early Childhood Birth to Grade 3  | #049 Early Childhood Special Education   |
| Blind & Low Vision Grades K to 12   | #047 Blind & Low Vision  |
| Deaf & Hard of Hearing<br>Grades K to 12  | #048 Deaf & Hard of Hearing  |
| Severely Developmentally<br>Disabled Grades K to 12   | #051 Severely Developmentally Disabled   |
| <b>Candidates MUST Choose One of Three Options Listed Below for Mild-Moderate Certification</b>   |  |
| Elementary Option<br>Mild to Moderate<br>Cross-Categorical<br>Grades K to 12<br><i>Must pass #050 Mild-Moderate and all four (4) subtests for Elementary Education to be eligible for certification</i> | Elementary Option -- #050 Mild-Moderate Cross-Categorical – plus all four (4) subtests included in the Elementary Multi-Content Assessment |
|   | Elementary Multi-Content** – all four (4) subtests   |
|   | #007 English/Language Arts Subtest   |
|   | #008 Mathematics Subtest   |
|   | #009 Science Subtest   |
|   | #010 Social Studies Subtest  |

| <b>Special Education -- Continued</b>   |  |
|---|--|
| <b>Certification Areas</b>  | <b>Test Codes and Titles</b>   |
| Middle/Secondary Option<br>Mild to Moderate<br>Cross-Categorical<br>Grades K to 12<br><i>Must pass #050 Mild-Moderate<br/>           and all four (4) subtests for<br/>           Middle/Secondary Education to<br/>           be eligible for certification<br/>           Middle/Secondary Option</i> | Middle/Secondary Option – #050 Mild-Moderate Cross-Categorical – plus the Multi-Content Assessment for Middle/Secondary                  |
|   | Middle/Secondary Multi-Content** -- All four (4) subtests  |
|   | #052 English/Language Arts Subtest   |
|   | #053 Mathematics Subtest   |
|   | #054 Science Subtest   |
|   | #055 Social Science  |
| Specific Content<br>Middle/Secondary Option<br>Mild to Moderate<br>Cross-Categorical<br>Grades K to 12<br>Must pass #050 Mild-Moderate<br>and one or more of the eleven<br>(11) major content assessments<br>or all six (6) of the Social Science<br>Multi-Content Subtests.                            | Specific Middle/Secondary Option – #050 Mild-Moderate Cross-Categorical plus one (1) or more of the specific content areas listed below: |
|   | #011 Middle School Education: Language Arts  |
|   | #012 Middle School Education: Mathematics  |
|   | #013 Middle School Education: Science  |
|   | #014 Middle School Education: Social Science   |
|   | #016 Biology, #018 Chemistry, #19 Earth Science, #021 Physics, and/or #024 General Science   |
|   | #020 English   |
|   | #023 Mathematics   |
|   | Social Science Multi-Content** – All Six (6) Subtests  |
| <b>Student Services</b>   |  |
| <b>Certification Areas</b>  | <b>Test Titles</b>   |
| Counselor – Grades K to 8<br>Counselor – Grades 7-12  | #056 Counselor   |
| School Psychologist<br>Grades K to 12   | #057 School Psychologist   |
| <b>School &amp; District Leadership</b>   |  |
| Building Level Administrator<br>Principal – Grades K to 8<br>Principal – Grades 7 to 12<br>Career Education Director<br>Grades 9 to 12<br>Special Education Administrator<br>Grades K to 12   | #058 Building Level Administrator  |
| Superintendent Grades K to 12   | #059 Superintendent  |
| <b>Professional Knowledge for Temporary Authorization Certification &amp; Certification Areas Without a Test</b>  |  |
| Middle School – Grades 5 to 9   | #062 Professional Knowledge: Middle School   |
|   | Appropriate Content Assessment(s) for Certification Area   |
| Secondary – Grades 9 to 12  | #063 Professional Knowledge  |
|   | Appropriate Content Assessment(s) for Certification Area   |



**OFFICE OF  
EDUCATOR QUALITY**

**MISSOURI CONTENT  
ASSESSMENTS**

October 28, 2014

Missouri Department of Elementary  
and Secondary Education



# Missouri Educator Gateway Assessments

2

- **MEGA'S Three Objectives**
  - Recruit the Right People
  - **Assess Content Knowledge**
    - 42 Certification Assessments
    - Increased Emphasis on Content
  - Assess Performance







## Tests

Find information about each test, including when and where you can test.

## Important Announcements

- Sep 17** Registration for the [MoGEA and Paraprofessional](#) tests is now open.
- Sep 3** Registration for the [Missouri Educator Profile \(MEP\)](#) is now open.
- Jul 31** Preparation materials now available. [Read more.](#)

Returning visitors: sign in to access your account.

[Sign In Now](#)

## Prospective Candidates

Quick links to program essentials to start you on your way:

- [What tests do I need to take?](#)
- [Test dates and sites](#)
- [Preparation materials](#)
- [Alternative testing arrangements](#)
- [Testing policies](#)

## Returning Visitors

Quick links for candidates who have already registered to test:

- [View/change registrations](#)
- [The day of the test](#)
- [View scores and testing history](#)
- [Get help finding information](#)

[www.mo.nesinc.com](http://www.mo.nesinc.com)

## Preparation Materials



- [Find prep materials for your test](#)
- [Take an online practice test](#)
- [View a test preparation video](#)

[www.mo.nesinc.com](http://www.mo.nesinc.com)

## Goals – Missouri Content Assessments

---

- **The test should be:**
  - **Based on unique needs and requirements of Missouri**
  - **Consistent with state and national educator standards and practices**
  - **Reflective of subject knowledge required for effective teaching**
  - **Accurate and valid**
  - **Free from bias**

# Test Development Process

## Missouri Educator Participation

- **Bias Review Committee**
  - Reviews for sensitivity and fairness
  - Checks for Bias
  - Reflects the diversity of the population
- **Content Advisory Committee**
  - Assesses appropriate content for significance and accuracy
  - Free from bias
  - Determines job-relatedness
- **Marker Response Committee**
  - Reviews constructed response items
  - Identifies scores based upon quality of responses

## Test Development Process

---

- **Conduct Program Planning**
- **Establish Advisory Committees**
- **Develop Test Framework**
- **Conduct Test Framework Review**
- **Conduct Content Validation Survey**
- **Develop Assessment Items**
- **Conduct Item Review Conference**
- **Marker Response Selection Meeting**
- **Conduct Item Validation and Standard Setting Conference**

## **Setting Standards on a Criterion-Referenced Test**

- **Performance level expected of a new teacher entering a classroom in Missouri**
- **Performance is compared to the criterion**
- **Examinees are not compared to other examinees, as in norm-referenced tests**



## Setting Standards on a Criterion-Referenced Test

- **Standard setting process**
  - **Defining the expected performance of a new teacher entering a classroom in Missouri**
    - **Computing an expected total test score for each subtest**
- **Standard setting procedure referred to as the “modified Angoff method”**
- **Industry standard method used for many professions – education, law, medicine, etc.**



## Overview of Procedures

---

- **Simulated Test-Taking**
- **Round One Ratings: Multiple–Choice Questions**
- **Round Two Ratings: Review and Revise Multiple-Choice Round One Ratings**
- **Round One Ratings: Constructed-Response Questions, if present**
- **Round Two Ratings: Review and Revise Constructed-Response Round One Ratings**
- **Conference Evaluation**

## Validation of Items

---

- **Competency Match**
- **Accuracy**
- **Free from Bias**
- **Job-Relatedness**

## Total Number of Participants

### Missouri Content Assessments Development Activities & Level of Participation October 27-28, 2014

| Activity                            | PK-12      | EPPs       | Total      |
|-------------------------------------|------------|------------|------------|
| Bias Review Committee               | 55         | 25         | 80         |
| On-Line Framework Review            | 208        | 97         | 305        |
| Item Validation & Standard Setting  | 248        | 122        | 370        |
| Marker Response Selection Committee | 9          | 14         | 23         |
| <b>Total Participation</b>          | <b>520</b> | <b>258</b> | <b>778</b> |

## Next Steps

---

- **Information provided by committee members to the Department of Elementary and Secondary Education (DESE)**
- **Department identifies recommended Qualifying Score for each assessment**
- **Recommendations to MACCE & MABEP**
- **State Board of Education establishes the Missouri passing score for each assessment – December 5, 2014.**
- **Continuous review of impact data**

## **Characteristics of Certification Decisions**

- **Purpose of certification tests: Protect the public**
- **First consideration: Meet experts' definition of a new teacher entering a classroom in Missouri**
- **Second consideration: Evaluate percentage of candidates passing**

# Contact Us – Office of Educator Quality

**573-751-1668**

**[EQPrep@dese.mo.gov](mailto:EQPrep@dese.mo.gov)**

